

Remarks

Claims 25-26 and 35-48 are presented for examination.

A. **Amendments**

Support for the new claims is as follows:

Claim 37 (demisting) – see 1st full paragraph on page 8

Claim 38 (demisting, condensing the water vapor, sparging the condensed water, and recovering a mixture of chlorine dioxide gas, inert gas, and residual water vapor) - see 1st full paragraph on page 8 and Figure 1A.

Claim 39 (various inert gases) – see original Claim 25 and page 3, line 3 for oxygen

Claim 40 (composition of mist) – see original Claim 26

Claim 41 (air) – see original Claim 25

Claim 42 (sodium chlorite) – see page 7 and description of Figure 1

Claim 43 (buffers) – see page 7 and description of Figure 1

Claim 44 (disinfecting crops) – see original Claim 29

Claim 45 (fresh produce, grains, or tobacco) – see original Claim 29

Claim 46 (vegetable or fruit) – see original Claim 30

Claim 47 (disinfecting clay) – see original Claim 31

Claim 48 (fields, greenhouses, storage cellars, agricultural equipment, and ventilation equipment) – see original Claim 32

Claim 49 (porous surface) – see original Claim 33

Claim 50 (wood or concrete) – see original Claim 34

B. Obviousness Rejection

Claims 25-33 were rejected under 35 U.S.C. 103(a) as obvious over U.S. 6,033,704 (to Talley et al.) in view of U.S. 6,120,731 (to Kross et al.)

According to the Examiner, Talley et al. show a mist which contains antimicrobial agents (e.g., chlorine dioxide) apparently contained in an air circulating system for treating fruits and vegetables. The Examiner believes Figure 1 (which is a storage shed) shows "agricultural equipment". The Examiner cites col. 1, lines 49-67, col. 2, lines 1-55, col. 3, lines 10-29, and col. 4, lines 10-52 and lines 60-65). The Examiner points out that Applicants own definition of "inert gas" includes "air" which is also disclosed by Talley et al. The Examiner notes that the reference teaches compositions within the ranges of Claim 26 [check with Brian]. The Examiner notes that the reference does not refer to a "disinfecting mist".

According to the Examiner, Kross et al. define a chlorine dioxide composition which is utilized as a disinfectant for substrates such as fruits and vegetables. Kross et al. identify chlorine dioxide as a disinfectant that may have further antimicrobiocidal action. The Examiner cites col. 3, line 25-35, col. 4, lines 10-22, and col. 7 lines 15-36.

The Examiner believes it would be within the skill of those skilled in the art to determine the effectiveness of a chlorine dioxide composition in the form of a mist because Kross et al. suggest that the effectiveness of chlorine dioxide as either a disinfectant or antimicrobial agent would depend upon its physical state.

The Examiner recognizes that the references do not teach disinfecting clay or porous surfaces; the Examiner believes, however, that the skilled artisan would expect these substances to be disinfected as were fruit and/or vegetables.

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C. Allowed Claims

Claims 35 and 36 directed to an electrolytic process for preparing a mist consisting essentially of gaseous chlorine dioxide, an inert gas, and water vapor are allowed.

D. Applicants' Comments

In view of the amendment of Claim 25 to delete air from the list of inert gases, it is believed that the obviousness rejection of Claims 25 and 26 has been overcome.

In view of the cancellation of Claims 27-34, the obviousness rejection of those claims is moot.

E. Closing

Entry of this amendment and an early allowance of the claims is respectfully requested. No new matter is presented.

Respectfully submitted,

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